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Federal Communications Commission
Washington, D. C.

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Sirs
I am writing with regard to the NOI, ET Docket No. 03-104

As a communications engineer with many years experience working for Motorola and for MCI I think I have some insight into the can of worms this represents. I hold and have held First Class Radio Telephone License (no General) and Amateur licenses for over 50 years.

First I have difficulty with the radiation that will occur from transmissions from the power line. If all lines were underground that might alleviate the problem to some extent. The spread spectrum usage proposed will most certainly raise the noise floor drastically on the spectrum in use. If an attempt is made to use masking to avoid certain frequencies I don't think that is realistic. How do you have anything left if you protect fixed land mobile, aeronautical mobile, maritime mobile, amateur radio terrestrial and satellite broadcast TV and radio, as listed in Para. 18 of FCC 03-100.

There are services beyond the proposed spectrum that can surely be affected by Harmonics also radiated. Where does it stop? I have heard Campus AM radio radiating 2 or 3 miles from the power line to which it is supposed to be confined.

If the local Power Company does no better in controlling BPL radiation than they do now in controlling electrical noise that radiates from their lines this will be a disaster. If they buried all of their lines the problem might be better, until they get into a building where the wiring will be above ground. They worried about ingress from amateurs using frequencies below 500KHz. If that was considered a potential problem surely radiation from the same lines would be a problem. It works both ways.

I believe you will also find that there have been studies done in several other countries concluding the idea is impractical. Please pay attention to these studies.

I hope you also will run a number of extensive tests under real (not carefully selected to shade the results) field conditions to verify the compatibility with other services using frequencies below 80 MHz. As an idea it has validity, but the devil is in the details. Please evaluate this carefully and take advantage of the studies done elsewhere.

The intent is admirable but this could be disaster is not very carefully implemented.

Sincerely

Donald Morton